Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1- $x = 0$ is a solution of the inequality _____.

(a) $3x + 5 < 0$ (b) $x > 0$

(c) $x + 2 < 0$ (d) $x - 2 < 0$ ✓

2- Mid-point of the points $(2, -2)$ and $(-2, 2)$ is:

(a) $(2, 2)$ (b) $(-2, -2)$

(c) $(0, 0)$ ✓   (d) $(1, 1)$

3- A line segment has _____ end points.

(a) 2 ✓   (b) 3

(c) 4   (d) 5

4- The square root of $a^2 - 2a + 1$ is _____.

(a) $\pm(a + 1)$ (b) $\pm(a - 1)$ ✓

(c) $a - 1$ (d) $a + 1$

5- Write $\sqrt[7]{x}$ in exponential form:

(a) x (b) $x^{7/2}$

(c) x^7 (d) $x^{1/7}$ ✓

6- The degree of polynomial $4x^4 + 2x^2y$ is _____.

(a) 1   (b) 2

(c) 3   (d) 4 ✓

7- Bisection means to divide into _____ equal parts.

(a) 2 ✓   (b) 3

(c) 4   (d) 5

8- A diagonal of parallelogram divides it into _____ congruent triangles.

(a) 3   (b) 2 ✓

(c) 4   (d) 5

9- If $\begin{vmatrix} 2 & 6 \\ 3 & x \end{vmatrix} = 0$, then 'x' is equal to:

(a) 9 √   (b) −6

(c) 6   (d) −9

10- If $(x - y, y + 1) = (0, 0)$, then (x, y) is:

(a) (−1, 1)   (b) (1, 1)

(c) (1, −1) √   (d) (−1, −1)

11- The symbol used for similarity is _____.

(a) $\cong$ (b) $\perp$

(c) $\leftrightarrow$ (d) $\sim$ √

12- In a parallelogram, opposite angles are _____.

(a) Parallel   (b) Congruent √

(c) Concurrent   (d) Perpendicular

13- A triangle having two sides congruent is call[ed] _____.

(a) Scalene   (b) Right angled

(c) Isosceles √   (d) Equilateral

14- The factors of $x^2 - 5x + 6$ are _____.

(a) $x + 1, x - 6$ (b) $x - 2, x - 3$ √

(c) $x + 6, x - 1$ (d) $x + 2, x + 3$

15- The relation $y = \log_z x$ implies _____.

(a) $z^y = x$ √   (b) $y^z = x$

(c) $x^z = y$ (d) $x^y = z$